NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

RECREATION AREA IMPROVEMENT

(Acre)
Code 562

Photo courtesy of South Florida Water Management District

DEFINITION

Establishing grasses, legumes, vines, shrubs, trees, or other plants or selectively reducing stand density and trimming woody plants to improve an area for recreation.

PURPOSE

To increase the attractiveness and usefulness of recreation areas and to protect the soil and plant resources.

CONDITIONS WHERE PRACTICE APPLIES

On any area planned for recreation use.

CRITERIA

Laws, Rules and Regulations. Compliance with all federal, state, and local laws is required.

Impacts to cultural resources, Federal and State protected species, and wetlands shall be evaluated during planning, design and implementation of this conservation practice in accord with established National and Florida NRCS policies (General Manual, Title 420-Part 401 and Title 190-Parts 410.22 and 410.26; National Planning Procedures Handbook, FL Supplements to Parts 600.1 and 600.5).

Establishment. Plant materials selected for use shall be selected based on landscape design elements needed to accomplish the specific purpose on the site. Important landscape design elements that are involved in various recreational plantings consist of plant height, spread, texture, the color of flower, leaf and stem in all seasons, and general plant habit, including root characteristics. Equally as important are wildlife habitat values, maintenance requirements, and fire hazard characteristics of the plants selected.

Plant species selection criteria also include:

- climatic conditions, such as annual rainfall, seasonal rainfall patterns, growing season length, humidity levels, temperature extremes and the USDA Plant Hardiness Zones.
- soil condition and position attributes such as pH, available water holding capacity, aspect, drainage class, inherent fertility, salinity and alkalinity, flooding and ponding, and levels of toxic elements that may be present such as selenium and aluminum.
- plant resistance to disease and insects common to the site or location.
- plant compatibility with other forage species and their selected cultivar(s) in rate of establishment, maturity, and growth habit when seeded together as a forage mixture.

Native species and varieties shall be used to the greatest extent possible. However, in heavily used areas or where special characteristics are desirable, non-native plants may be better adapted to local situations. Species recommendations for local use are contained in the NRCS Plant Materials Program's "Plant Materials for Wildlife," technical reference, the Conservation Practice Standard Supplement for Pasture and Hayland Planting (Code 512), and

the Practice Standard Specifications and Job Sheet for Tree/Shrub Establishment, Code 612, found in Part 636.5 of the National Biology Handbook.

Nuisance, noxious or invasive species shall not be selected. Current lists of noxious and invasive species can be found in Section I of the Florida Field Office Technical Guide.

Specified seeding/establishment rates, methods of planting and date of planting shall be consistent with documented guidance cited by research institutions or agency demonstration trials for achieving satisfactory establishment.

Plants shall be spaced according to the planting plan or specifications. Spacing is determined by many factors including plant height, spread, habit, effect desired, etc.

Planting methods, time of planting, site preparation, etc. will follow the Standard, Supplement and Job Sheet for Tree/Shrub Establishment, Pasture and Hayland Planting, or Critical Area Planting, Code 342, as appropriate.

Pruning. Pruning shall be performed as needed to maintain or improve human and animal safety, maintain or improve plant vigor, control plant size and form, influence flowering and fruit production, and rejuvenate old plants. Pruning shall follow the NRCS Conservation Practice Standard for Tree/Shrub Pruning, Code 660.

An evaluation shall be done prior to pruning to determine if there will be any negative effects on the plants to be pruned and adjacent desirable species. Pruning shall be accomplished with consideration to safety factors such as lighting, access to entries and exits, visibility, etc.

Pruning operations shall be scheduled to reduce or eliminate undesirable effects on the species to be pruned, adjacent desirable plants, wildlife of importance in the area. Use the following information as a guide in selecting the appropriate time of year to prune shrubs and trees:

- Prune flowering plants such as abelia, hibiscus and rose while dormant or just before spring growth flush.
- When pruning spring-flowering plants such as azaleas and dogwoods, maximize production of next year's flowers by pruning in late spring.
- Prune oaks, maples, hickories and other large shade trees during the dormant season to prevent excessive sprouting that results when pruning occurs during the active growth period.

Limbs that overhang trails, paths, and roadways shall be pruned to a height that will facilitate movement of people, vehicles and animals. As a general rule, limbs should be pruned to a minimum of 8 feet where pedestrian traffic occurs and 12 feet where vehicles or horse based recreation occurs.

Thinning and Removal. Trees and other plants that present a hazard to users of the area shall be removed. Hazard trees are those which are seriously defective, diseased, or in danger of windthrow or toppling.

An evaluation shall be done prior to thinning and removal to determine if there will be any negative effects on the plants to be pruned and adjacent desirable species. Thinning and removal shall be accomplished with consideration to safety factors such as lighting, access to entries and exits, visibility, etc.

The method, felling direction and timing of tree removal shall protect sensitive areas such as wetlands, riparian zones, cultural resources, and structures. Thinning and removal activities will not cause excessive soil erosion, compaction, rutting or damage to remaining vegetation.

Stumps and other debris shall be removed and the soil restored to the natural grade. Stumps and debris may be utilized as a source for mulch or may be stacked and used for wildlife habitat enhancement if site conditions permit.

CONSIDERATIONS

Pruning. The primary considerations for pruning are the characteristics of each plant. With most plants, the ideal time to prune is during the dormant season prior to the beginning of new growth. Early flowering shrubs should be pruned shortly after flowering to maintain flower buds for the following season. In general, from the standpoint of plant growth, pruning can be done at practically any time of the year. However, consideration must be given to factors of food supply, flowering period, and winter hardiness. Foliage is necessary for photosynthesis and the

pruning of new growth in the spring can be detrimental to subsequent growth and the general condition of the plant. In some instances, late summer pruning may promote new growth which will not harden off sufficiently before freezing weather. In addition, food reserves will be removed.

When pruning is being considered, determine:

- if the plant will be subject to sun or wind damage.
- if there are other desirable species present which require shade to exist.
- how the pruning debris will be disposed of properly.
- the vegetative response of the tree or shrub being pruned (e.g., will it sucker from the base or send out many new limbs from latent buds?).

When pruning is being considered to visually enhance an area, determine if:

- the pruning will enhance the area by opening up vistas or screening out undesirable views;
- the pruning will allow the addition of species. in the plant community which will provide unique form, color, or texture to an area.

Thinning and Removal. Trees and shrubs should be spaced or thinned to meet the needs of the area. In areas of dense shade or poor ventilation, remove trees to decrease shade and increase air circulation.

Remove trees to provide adequate space for trails, toilets, picnic tables, fireplaces, etc. Retain specimen types that have a unique appearance or beauty and are in a protected location.

Favor the retention of thrifty, deep-rooted trees resistant to abrasion and traffic damage.

Water Quantity. Conservation effects on water quantity should be a primary consideration of this practice. Use of native species and plants associated with xeriscapes should be considered.

Increasing vegetative cover by planting new vegetation may decrease runoff and increase infiltration. Where infiltration exceeds evapo-transpiration, deep percolation below the root zone may occur.

Decreasing vegetative cover by thinning and/or removal of unwanted vegetation may increase runoff. The increased runoff will decrease over time as the vegetative cover increases.

Water Quality. Conservation effects on water quality should be a primary consideration of this practice. The long-term effect of applying the practice should be a reduction of nutrients and sediment in surface water. Short-term sediment increases may be noted during and immediately after vegetation establishment due to disturbance of the soil surface and preparation of the seedbed. Measures shall be taken to minimize this effect. Where nutrients and/or pesticides are used, follow practice standards for Nutrient Management, Code 590, and Pest Management, Code 595.

PLANS AND SPECIFICATIONS

Plans and specifications for improving recreation areas shall be prepared for each field or treatment unit according to the Criteria, Considerations, and Operation & Maintenance described in this standard.

Plans (drawings) shall be prepared indicating the work to be accomplished. Specifications for applying this practice shall be prepared using approved practice specifications, job sheets, and a narrative description of prescribed treatments, plant materials, and maintenance measures for each type of recreation area. As a minimum, the plans and specifications shall include:

- NRCS conservation plan map or other appropriate map showing area to be treated.
- site preparation methods, species, spacing, planting methods, date of planting, and maintenance requirements for establishment of plantings.
- methods of pruning, thinning, removal and debris disposal.
- species, spacing, dates of pruning or thinning/removal, and effects on target and adjacent desirable plant species.

OPERATION AND MAINTENANCE

An operation and maintenance plan must be prepared by the designer for use by the owner or other parties responsible for this practice. The plan should provide specific instructions to ensure that the prescribed conservation measures

function properly. It should also include for periodic inspections and prompt repair or replacement of damaged components.

REFERENCES

Florida Exotic Pest Plant Council, *List of Invasive Species*, http://www.fleppc.org/Plantlist/list.htm

Florida Department of Agriculture and Consumer Services, Division of Plant Industry, *Noxious Weed List*, http://doacs.state.fl.us/~pi/5b-57.htm

NRCS Conservation Practice Standards:

Critical Area Planting, Code 342
Pasture and Hayland Planting, Code 512
Pasture and Hayland Planting, Supplement, Code 512
Nutrient Management, Code 590
Pest Management, Code 595
Tree/Shrub Planting Specifications, Code 612
Tree/Shrub Planting Job Sheet, Code 612
Tree/Shrub Pruning, Code 660

"Plant Materials for Wildlife," NRCS Plant Materials Program.